

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

S10 1 PN='JP 60026026'
? 10/7/1

10/7/1
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

004244845

WPI Acc No: 1985-071723/198512

Prepn. of high mol.wt polyester with lower acetaldehyde concn. - by solid phase polymerisation of crystallised polyester prepolymer based on ethylene terephthalate

Patent Assignee: TOYOBKO KK (TOYM)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 60026026	A	19850208	JP 83134869	A	19830722	198512 B
JP 94017466	B2	19940309	JP 83134869	A	19830722	199413

Priority Applications (No Type Date): JP 83134869 A 19830722

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 60026026 A 5

JP 94017466 B2 4 C08G-063/00 Based on patent JP 60026026

Abstract (Basic): JP 60026026 A

Prepn. has (1) a polyester with a main repeat unit of ethylene-terephthalate and having a limiting viscosity of 0.4 or more and a density of 1.38 or less is crystallised in a steam atmos., at a temp. lower than the solid phase polymerisation temp. of the polyester, and then (2) the resulting prepolymer is subjected to solid phase polymerisation in an inert gas atmos. or under reduced pressure at 180-240 deg. C.

USE/ADVANTAGE - Polyesters of high polymerisation degree with less acetaldehyde content may be obtd., which are esp. suitable for materials of containers for foods, medicines and cosmetics.

In an example (1) prepн. of prepolymer by crystallisation has dimethyl terephthalate, ethylene-glycol and manganese acetate 4H₂O subjected to inter-esterification, and then germanium dioxide and phosphoric acid added before subjecting to melt-polycondensation to obtain polyethylene terephthalate pellets with an inherent viscosity of 0.52, acetaldehyde content of 120ppm, and density of 1.338. The obtd. pellets then subjected to heat treatment at 160 deg. C in a steam atmos. for 10 mins., give a prepolymer having a density of 1.380, crystallisation degree of about 50%, and acetaldehyde content: 13.2ppm.

Solid phase polymerisation comprises drying these pellets for 4 hours with a hot and dry air at 160 deg. C, and then subjecting them to solid phase polymerisation at 210 deg. C, under a reduced pressure of 0.05 mmHg, for 16 hours. The obtd. polymer has an inherent viscosity of 0.79 and an acetaldehyde content of 2.0ppm.

0/0

Derwent Class: A23; A92